

REMARKS

Reconsideration of the application is respectfully requested in view of the above amendment and the following remarks.

I. STATUS OF THE CLAIMS

Claims 1-2, 4-6, 11-34 and 39 are pending in this application. Claims 1, 2, 4-6 and 25-34 have been allowed. Claims 14, 15, 17 and 20-24 have been objected to. Claims 11-13, 16, 18, 19 and 39 have been rejected. Claims 1, 2 and 6 have been amended. New claim 40 has been added, and claim 39 has been canceled without prejudice. It is respectfully submitted that no new matter has been added by virtue of the amendment.

II. Rejection under 35 U.S.C § 102

Claim 39 has been rejected under 35 U.S.C. 102(b) as being anticipated by Stols (US 6,200,942B1) for the reasons stated on page 2 of the Office Action.

The rejection is now moot since claim 39 has been canceled.

II. Rejection under 35 U.S.C § 103

Claims 11-13, 16 and 18 and 19 have been rejected under 35 U.S.C. 103(a) as unpatentable over Kitano (US 5,665,646) in view of Stols (US 6,200,942B1).

The rejection is traversed, in part, because there is no suggestion or motivation to combine Kitano and Stols. The Examiner states that it would have been obvious to one of ordinary skill in the art, at the time of invention, to modify Kitano by cleaning the non-reacting metal layer, using a cleaning solution as taught by Stols, because the cleaning solution (of Stols) has particular application to metals. Applicants respectfully disagree.

Kitano describes removing non-reacted titanium film using ammonium hydrogen peroxide solution, which removes a titanium film and a TiN layer without removing a TiSi₂ layer. See e.g., col. 5, lines 19-24; col. 6, lines 22-25. The TiSi₂ layer can be classified into a metal category. However, Stols broadly describes cleaning the surfaces of metal articles. Thus, one ordinary skill in the art would not look to Stols to remove both the titanium film and TiN layer while not removing the TiSi₂ layer in manufacturing a CMOS semiconductor device. Indeed, the Examiner combined the isolated teachings of cited references using a suggestion improperly stemmed from applicants' disclosure and not from the cited references.

Accordingly, the Examiner's reliance on Stols to support the rejection under section 103 is misplaced and the rejection of claim 11 is legally deficient.

Thus, claim 11 is not rendered obvious by Kitano in view of Stols. As claims 12, 13, 16, 18 and 19 depend from claim 11, they are also not rendered obvious by Kitano in view of Stols for at least these reasons.

III. CONCLUSION

For the foregoing reasons, the present application is believed to be in condition for allowance. The Examiner's early and favorable action is respectfully requested. The Examiner is invited to contact the undersigned if he has any questions or comments in this matter.

Respectfully submitted,



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